

# **EXHIBIT A**

IN THE UNITED STATES DISTRICT COURT  
FOR THE EASTERN DISTRICT OF TEXAS  
MARSHALL DIVISION

KAIFI LLC, ) No. 2:20-CV-281-JRG  
Plaintiff, )  
v. )  
T-MOBILE US, INC. and )  
T-MOBILE USA, INC., )  
Defendants. )

DEPOSITION OF PETER RYSAVY

March 31, 2021

Wednesday

8:30 A.M.

THE VIDEOTAPED DEPOSITION OF PETER RYSAVY  
was taken by remote videoconferencing set up by  
Schmitt Reporting - Veritext Portland, 400 NW  
Columbia Street, Suite 140, Vancouver, Washington,  
before Sara Fahey Wilson, CSR, Certified Shorthand  
Reporter in and for the State of Oregon.

<p>1 APPEARANCES</p> <p>2 (All counsel appearing by remote videoconference)</p> <p>3</p> <p>4 For the Plaintiff:</p> <p>5 IRELL &amp; MANELLA</p> <p>6 1800 Avenue of the Stars, Suite 900</p> <p>7 Los Angeles, California 90067-4276</p> <p>8 310-277-1010</p> <p>9 BY: MR. JASON G. SHEASBY</p> <p>10 jsheasby@irell.com</p> <p>11</p> <p>12 For the Defendants:</p> <p>13 GIBSON DUNN</p> <p>14 2001 Ross Avenue, Suite 2100</p> <p>15 Dallas, Texas 75201</p> <p>16 214-698-3423</p> <p>17 BY: MR. NATHAN R. CURTIS</p> <p>18 ncurtis@gibsondunn.com</p> <p>19</p> <p>20 Videographed By:</p> <p>21 MR. TIM GARRETT</p> <p>22</p> <p>23 Zoom Monitor:</p> <p>24 MR. RICARDO YI - VERITEXT</p> <p>25</p> <p style="text-align: right;">Page 2</p>	<p>1 THE VIDEOGRAPHER: Good morning. 08:27</p> <p>2 We're now on the record. Today's date is March 08:27</p> <p>3 31st, 2021, and the time is 8:29 a.m. 08:27</p> <p>4 This is the unit -- media unit one of 08:27</p> <p>5 the video recorded deposition of Peter Rysavy being 08:27</p> <p>6 taken in the matter of Kaifi LLC versus T-Mobile 08:27</p> <p>7 U.S., Inc. 08:27</p> <p>8 The court reporter is Sara Wilson, who 08:27</p> <p>9 will now swear or affirm the witness. 08:28</p> <p>10 08:28</p> <p>11 PETER RYSAVY, 08:26</p> <p>12 having been first duly sworn to testify the truth, 08:25</p> <p>13 the whole truth, and nothing but the truth, was 08:23</p> <p>14 examined and testified as follows: 08:22</p> <p>15 08:20</p> <p>16 EXAMINATION 08:18</p> <p>17 BY MR. SHEASBY: 08:28</p> <p>18 Q. Good morning, sir. Can you state your 08:28</p> <p>19 name for the record. 08:28</p> <p>20 A. Peter Rysavy. 08:28</p> <p>21 Q. You've been retained as an expert by 08:28</p> <p>22 T-Mobile. Is that correct? 08:28</p> <p>23 A. That's correct. 08:28</p> <p>24 Q. You submitted an expert declaration in 08:28</p> <p>25 this case. Is that correct? 08:28</p> <p style="text-align: right;">Page 4</p>
<p>1 INDEX</p> <p>2</p> <p>3 WITNESS.....PAGE</p> <p>4 PETER RYSAVY</p> <p>5 BY MR. SHEASBY 4</p> <p>6</p> <p>7 EXHIBITS.....PAGE</p> <p>8 Exhibit 1 Exhibit 1 to the Declaration 12</p> <p>9 of Peter Rysavy - 728 Patent</p> <p>10 Exhibit 2 Distributed Router 22</p> <p>11 Architecture for</p> <p>12 Packet-Routed Optical</p> <p>13 Networks</p> <p>14 Exhibit 3 Different Types of Wired 30</p> <p>15 Internet Connections</p> <p>16 Exhibit 5 Router Definition 32</p> <p>17 Exhibit 6 P.R. 4-3(B) Disclosure of 57</p> <p>18 Potential Testimony From</p> <p>19 Thomas L. Blackburn</p> <p>20 Exhibit 8 RFC 2002 46</p> <p>21</p> <p>22 MARKED TEXT.....PAGE/LINE</p> <p>23 None.</p> <p>24</p> <p>25</p> <p style="text-align: right;">Page 3</p>	<p>1 A. Yes, I did. 08:28</p> <p>2 Q. Did you write the expert declaration 08:28</p> <p>3 yourself? 08:28</p> <p>4 A. I wrote it in conjunction with the 08:28</p> <p>5 attorney I worked with at Gibson Dunn. 08:28</p> <p>6 Q. You collaborated with the attorney at 08:28</p> <p>7 Gibson Dunn? 08:28</p> <p>8 A. Yes. 08:28</p> <p>9 Q. Did you have an opportunity to read the 08:28</p> <p>10 declaration of Mr. Blackburn? 08:28</p> <p>11 A. Yes, I did read Mr. Blackburn's 08:29</p> <p>12 declaration. 08:29</p> <p>13 Q. Are you prepared to talk about it and 08:29</p> <p>14 discuss with what you agree and disagree with in 08:29</p> <p>15 Mr. Blackburn's declaration today? 08:29</p> <p>16 A. I can comment on some items with respect 08:29</p> <p>17 to his declaration. 08:29</p> <p>18 Q. Okay. 08:29</p> <p>19 Do you know what a femtocell and a 08:29</p> <p>20 nanocell are? 08:29</p> <p>21 A. I have heard the terms before, but it 08:29</p> <p>22 depends on the context. 08:29</p> <p>23 Q. In the context of cellular networks, have 08:29</p> <p>24 you heard of femtocells? 08:29</p> <p>25 A. In the context of cellular networks, I 08:29</p> <p style="text-align: right;">Page 5</p>

<p>1 network to be connected to the internet. 08:43</p> <p>2 Q. 802.11 networks are connected to the 08:43</p> <p>3 internet. Correct? 08:43</p> <p>4 A. No. That is just one implementation of an 08:43</p> <p>5 802.11 network. An 802.11 network can be connected 08:43</p> <p>6 to the internet, but an 802.11 network can also 08:43</p> <p>7 operate in isolation. 08:43</p> <p>8 Q. When a cellular network is in operation, 08:43</p> <p>9 there are going to be instances in which individual 08:44</p> <p>10 packets are dropped. Correct? 08:44</p> <p>11 A. When -- okay, let me understand the 08:44</p> <p>12 question. 08:44</p> <p>13 You said that when a cellular network is 08:44</p> <p>14 connected to the internet that packets can be 08:44</p> <p>15 dropped? 08:44</p> <p>16 Q. Yes. 08:44</p> <p>17 A. There's nothing inherent about connecting 08:44</p> <p>18 to the internet that results in packets being 08:44</p> <p>19 dropped. Packets being dropped is just a by-product 08:44</p> <p>20 of any communication system that occasionally, 08:44</p> <p>21 depending on the technology and the environment, can 08:44</p> <p>22 have errors that can ultimately result in packets 08:44</p> <p>23 being dropped. 08:45</p> <p>24 Q. Let me ask it this way: When packets are 08:45</p> <p>25 dropped, the user will always perceive an 08:45</p> <p style="text-align: right;">Page 14</p>	<p>1 A. I would need to know what you mean by 08:47</p> <p>2 "distributed." 08:47</p> <p>3 Q. A routing function for a network can be 08:47</p> <p>4 distributed across multiple physical devices? 08:47</p> <p>5 A. I haven't seen that type of implementation 08:47</p> <p>6 of a router. 08:47</p> <p>7 Q. Did you investigate in preparation for 08:47</p> <p>8 your expert declaration whether routers can be 08:47</p> <p>9 implemented across multiple physical devices? 08:47</p> <p>10 A. As part of my preparation for this 08:47</p> <p>11 deposition, I did not investigate whether routers 08:47</p> <p>12 can be distributed. 08:48</p> <p>13 Q. Can routing functions be performed by a 08:48</p> <p>14 general purpose computer? 08:48</p> <p>15 A. It would depend on whether the -- what 08:48</p> <p>16 exact routing functions you're implementing and the 08:48</p> <p>17 capabilities of that general purpose computer as 08:48</p> <p>18 well as its physical connections to different types 08:48</p> <p>19 of networks. 08:48</p> <p>20 Q. Sir, a general purpose computer cannot 08:48</p> <p>21 perform a routing function. Correct? 08:49</p> <p>22 A. Whether a computer can perform routing 08:49</p> <p>23 functions depends on the capabilities of that 08:49</p> <p>24 specific computer. 08:49</p> <p>25 Q. Sir, a general purpose computer can't 08:49</p> <p style="text-align: right;">Page 16</p>
<p>1 interruption in the communication whether it's data 08:45</p> <p>2 or voice. Correct? 08:45</p> <p>3 A. I disagree. 08:45</p> <p>4 Q. Sir, in order to have seamless and 08:45</p> <p>5 without-interruption communication, you must ensure 08:45</p> <p>6 that all packets are delivered. No packets can be 08:45</p> <p>7 dropped. Correct? 08:45</p> <p>8 A. That's not really the case because 08:45</p> <p>9 communication systems have various forms of error 08:45</p> <p>10 control and redundancy built into them, as well as 08:45</p> <p>11 techniques such as buffering. So if packets had 08:46</p> <p>12 dropped, that can result in some kind of 08:46</p> <p>13 interruption, but not necessarily. 08:46</p> <p>14 Q. Sir, it's the case that if packets are 08:46</p> <p>15 dropped, you're not communicating seamlessly and 08:46</p> <p>16 without interruption. Correct? 08:46</p> <p>17 A. Again, that's not necessarily the case. 08:46</p> <p>18 Q. Let me ask you the next question, which is 08:46</p> <p>19 routers can exist on specialized pieces of 08:46</p> <p>20 equipment. Correct? 08:46</p> <p>21 A. I'm not sure what you mean by "specialized 08:46</p> <p>22 pieces of equipment," but routers can be implemented 08:46</p> <p>23 in different physical configurations. 08:46</p> <p>24 Q. Routers can be implemented and distributed 08:46</p> <p>25 in physical configurations. Correct? 08:46</p> <p style="text-align: right;">Page 15</p>	<p>1 perform routing functions. Correct? 08:49</p> <p>2 A. As I said, whether a route -- sorry. Let 08:49</p> <p>3 me repeat -- or start again. 08:49</p> <p>4 Whether a general purpose computer can 08:49</p> <p>5 perform routing functions depends on the 08:49</p> <p>6 capabilities of that computer. 08:49</p> <p>7 Q. Sir, if it's a general purpose computer, 08:49</p> <p>8 that means it can't perform routing functions? 08:49</p> <p>9 A. As I said, whether or not a general 08:49</p> <p>10 purpose computer can perform routing functions 08:49</p> <p>11 depends on the capabilities of that computer. 08:49</p> <p>12 Q. Let's go to Exhibit 1 again, which is the 08:50</p> <p>13 patent. Tell me when you're there. 08:50</p> <p>14 A. Yes. 08:50</p> <p>15 Q. The last element says (reading): A 08:50</p> <p>16 router that determines a location, data 08:50</p> <p>17 communication terminal. 08:50</p> <p>18 Do you see that, sir? 08:50</p> <p>19 A. I do. 08:50</p> <p>20 Q. That excludes the use of a general purpose 08:50</p> <p>21 computer for a router. Correct? 08:50</p> <p>22 A. As I said, whether or not a general 08:50</p> <p>23 purpose computer can be a router depends on the 08:51</p> <p>24 capabilities of that computer. 08:51</p> <p>25 Q. Are there instances in which a general 08:51</p> <p style="text-align: right;">Page 17</p>

1 Q. What is location information? 09:06	1 A. In the scenario I described, that cell 09:11
2 A. Well, location information is an 09:06	2 tower could have a fiber-optic connection to the 09:11
3 agreed-upon construction. And referring to, if I 09:07	3 internet server -- service provider's core network, 09:11
4 may, the Joint Claim Construction and Pre-Hearing 09:07	4 which would then have a connection to the internet. 09:11
5 Statement, it's information on a locational area, or 09:07	5 BY MR. SHEASBY: 09:11
6 indoor system ID information, or both. 09:07	6 Q. Are you aware of any service provider 09:11
7 Q. In the patent, the location register would 09:07	7 network that doesn't ultimately have a physical 09:11
8 only store indoor location information or outdoor 09:07	8 wired connection to the internet? 09:11
9 location information. It won't store both at the 09:07	9 A. It depends exactly what you mean by 09:11
10 same time. Correct? 09:08	10 "wire." If you mean it to include -- and I think 09:11
11 A. I don't believe the patent states that. 09:08	11 meant -- previously you mentioned fiber-optic 09:11
12 It doesn't -- the patent does not preclude storing 09:08	12 cables -- then, yes, there will be some physical 09:11
13 both. 09:08	13 connection at some point to a network that can be 09:11
14 Q. Okay. 09:08	14 considered the internet. 09:12
15 Let me ask you the next question, which is 09:08	15 Q. Okay. 09:12
16 that when the -- when the indoor gateway -- let me 09:08	16 Let me ask you this question, which is 09:12
17 ask it this way. 09:08	17 that is a common understanding of the word "wire" at 09:12
18 For 802.11 networks that are connected to 09:08	18 the time of the patent -- would it include coaxial 09:12
19 the internet, that connection is going to be 09:08	19 cable? Fiber-optic? 09:12
20 through -- that gateway is going to be connected to 09:08	20 MR. CURTIS: Objection. Form. 09:12
21 the internet through a wire, correct, at some point? 09:09	21 Outside the scope. 09:12
22 MR. CURTIS: Objection, form. 09:09	22 A. At the time of the patent? A person of 09:12
23 A. An 802.11 network or Wi-Fi network can be 09:09	23 ordinary skill in the art wouldn't just use the word 09:12
24 connected to the internet, and there could be a wire 09:09	24 "wire." They would refer to the specific type of 09:12
25 such as a cable -- coax cable, for example, yeah. 09:09	25 connection, whether it's coax or fiber-optic 09:12
Page 26	Page 28
1 BY MR. SHEASBY: 09:09	1 connection. And most -- I would say that a person 09:12
2 Q. Yeah. I guess I'm asking a slightly 09:09	2 of ordinary skill in the art would find the term 09:12
3 different question. In the situation when the 09:09	3 "wire" to be vague. 09:12
4 802.11, the Wi-Fi gateway, is connected -- is 09:09	4 BY MR. SHEASBY: 09:12
5 connected to the internet, is there any instances in 09:09	5 Q. The term "wire" is generic. Is that 09:12
6 which there is not going to be a wire ultimately 09:09	6 correct? 09:12
7 connecting it? 09:09	7 A. The term "wire" is both vague and generic. 09:12
8 MR. CURTIS: Objection, form. Outside 09:09	8 Q. Copper -- copper cable as an example of a 09:13
9 the scope. 09:09	9 wire. Correct? 09:13
10 A. It's not anything I cover in my 09:09	10 A. A wire connection can use copper. 09:13
11 declaration but that Wi-Fi network can be connected 09:10	11 Q. Wire connection can also use coaxial 09:13
12 via a wire, but a wire is not necessary nowadays. 09:10	12 cable. Correct? 09:13
13 Increasingly, that connection to the internet is 09:10	13 A. A coaxial cable could be considered to be 09:13
14 done over a wireless connection. 09:10	14 a wired connection. 09:13
15 BY MR. SHEASBY: 09:10	15 Q. And a fiber-optic or optical cable could 09:13
16 Q. A wireless connection to what? 09:10	16 also be considered a wired connection. Correct? 09:13
17 A. It could be a wireless connection from a 09:10	17 A. In a more loose interpretation of the word 09:13
18 home to a cell tower, for example, or to some other 09:10	18 "wired connection," a fiber-optic cable could be 09:13
19 radio connection provided by an internet service 09:10	19 considered a wired connection, but I think some 09:13
20 provider. 09:10	20 people would object to that interpretation. 09:13
21 Q. But at some level, even if you went 09:10	21 Q. A person of ordinary skill in the art -- 09:13
22 through that cell tower, at some point there's a 09:11	22 well -- 09:14
23 physical wire in that system connecting to the 09:11	23 (Pause.) 09:15
24 internet. Correct? 09:11	24 You read Claim 12 of the patent. Correct? 09:15
25 MR. CURTIS: Same objections. 09:11	25 A. Yes, I did. 09:16
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<p>1 Q. You were not able to understand Claim 12. 09:16</p> <p>2 Correct? 09:16</p> <p>3 A. I never said that I didn't understand 09:16</p> <p>4 Claim 12. 09:16</p> <p>5 Q. Sir, as a factual matter, as a person of 09:16</p> <p>6 ordinary skill in the art, you're not able to 09:16</p> <p>7 understand what Claim 12 is claiming. Correct? 09:16</p> <p>8 A. I don't believe that is a correct 09:16</p> <p>9 statement. 09:16</p> <p>10 (Deposition Exhibit Number 3 09:15</p> <p>11 marked for identification.) 09:13</p> <p>12 BY MR. SHEASBY: 09:17</p> <p>13 Q. Why don't you go ahead and look at Exhibit 09:17</p> <p>14 3. 09:17</p> <p>15 A. Did you want me to read the article? 09:17</p> <p>16 Q. Yes. 09:18</p> <p>17 (Pause.) 09:18</p> <p>18 Just to give you a heads up, the question 09:18</p> <p>19 I'm asking is that after reviewing the article, it's 09:18</p> <p>20 fair to say that folks consider coaxial cable, 09:18</p> <p>21 fiber-optic cable, and traditional copper wire as 09:18</p> <p>22 all options for wired connections to the internet? 09:18</p> <p>23 A. Well, according to this off -- author of 09:19</p> <p>24 the article, he lists dial-up, cable internet, DSL, 09:19</p> <p>25 and fiber-optic as different forms of wired internet 09:19</p> <p style="text-align: right;">Page 30</p>	<p>1 Q. If I said to you you can use any type of 09:20</p> <p>2 wire connection you want, what would you understand 09:21</p> <p>3 that to mean? 09:21</p> <p>4 A. The term that I've used in my writing is 09:21</p> <p>5 "wire line" versus "wireless," so when I use the 09:21</p> <p>6 term "wire line," I do use that to refer to any 09:21</p> <p>7 connection that is not wireless. So that would 09:21</p> <p>8 include copper, for instance, or a fiber-optic 09:21</p> <p>9 connection. 09:21</p> <p>10 Q. Okay. 09:21</p> <p>11 Let me ask you the next question, which 09:21</p> <p>12 is, is it possible to implement a server using 09:21</p> <p>13 software alone on a general purpose computer? 09:21</p> <p>14 A. Can you repeat the question, please? 09:21</p> <p>15 Q. Sure. One second. 09:21</p> <p>16 (Pause.) 09:22</p> <p>17 I'm marking a new exhibit. I'll tell you 09:22</p> <p>18 -- let me know when you get it. Okay? It should be 09:24</p> <p>19 there for you. 09:24</p> <p>20 A. The folder shows five exhibits. 09:24</p> <p>21 (Deposition Exhibit Number 5 09:23</p> <p>22 marked for identification.) 09:21</p> <p>23 BY MR. SHEASBY: 09:24</p> <p>24 Q. Yeah. So it's Exhibit Number 5. You 09:24</p> <p>25 probably want to download it because it's -- let me 09:24</p> <p style="text-align: right;">Page 32</p>
<p>1 connections. 09:19</p> <p>2 Q. So it would be fair to say that there are 09:19</p> <p>3 folks in this industry who treat fiber-optic, 09:19</p> <p>4 copper, and coaxial cable all as wired internet 09:19</p> <p>5 connections? 09:19</p> <p>6 MR. CURTIS: Objection, form. 09:19</p> <p>7 A. This particular author has fiber-optic 09:19</p> <p>8 connections in an article that discusses or is 09:19</p> <p>9 titled Different Types of Wired Internet 09:19</p> <p>10 Connections. 09:19</p> <p>11 BY MR. SHEASBY: 09:20</p> <p>12 Q. Do you have any factual basis to disagree 09:20</p> <p>13 that persons in this industry consider coaxial, 09:20</p> <p>14 copper, and fiber-optic as all examples of wired 09:20</p> <p>15 connections? 09:20</p> <p>16 A. I do note that he has a sentence saying 09:20</p> <p>17 (reading): As we all know, light travels 09:20</p> <p>18 much faster as compared to electrical 09:20</p> <p>19 signals flowing across a wire. 09:20</p> <p>20 So that suggests that he draws some 09:20</p> <p>21 distinction between fiber and wire. Again, I would 09:20</p> <p>22 repeat that "wire" is a vague term, and in 09:20</p> <p>23 discussing an actual network, an engineer would 09:20</p> <p>24 specify the type of connection and refer to that 09:20</p> <p>25 kind of connection. 09:20</p> <p style="text-align: right;">Page 31</p>	<p>1 know when you have it. 09:25</p> <p>2 A. I have it. 09:25</p> <p>3 Q. If you scroll down, it talks about using 09:25</p> <p>4 Windows PC as a router? 09:26</p> <p>5 A. Okay. I see that. 09:26</p> <p>6 Q. Do you disagree that a general purpose 09:26</p> <p>7 computer can be used as a router when provisioned 09:26</p> <p>8 with appropriate software. Correct? 09:26</p> <p>9 A. What I said was that a general purpose 09:26</p> <p>10 computer can be a router depending on the 09:26</p> <p>11 capabilities it has. 09:26</p> <p>12 Q. Sir, if you go to the patent, you will see 09:26</p> <p>13 it says a location register -- this is Claim 1 -- 09:27</p> <p>14 that stores information on the data communication 09:27</p> <p>15 terminal received through the indoor network or 09:27</p> <p>16 outdoor wireless network. 09:27</p> <p>17 Do you see that, sir? 09:27</p> <p>18 A. I do. 09:27</p> <p>19 Q. The location register must be part of the 09:27</p> <p>20 router. Correct? 09:27</p> <p>21 A. The figures show the location register 09:27</p> <p>22 separate from routers. For example, in Figure 1B, 09:27</p> <p>23 the location register is item 80 and the router is 09:27</p> <p>24 item 47. 09:27</p> <p>25 Q. Sir, the location register must be part of 09:28</p> <p style="text-align: right;">Page 33</p>

1 Q. So let's go to the patent. 09:42	1 (Pause.) 09:45
2 A. So just to clarify my last answer. Even 09:43	2 And, actually, column eight. It says -- 09:47
3 though I said I don't have an opinion on the number 09:43	3 column eight, lines three through six, it says 09:47
4 of location registers, I did say that the location 09:43	4 (reading): The location register may be a 09:47
5 register does need to be in a known networking 09:43	5 home agent or a foreign agent, and uses a 09:47
6 location and implemented as a discrete node. 09:43	6 mobile IPv4 or IPv6 address system in order 09:47
7 Q. Yeah. I mean, what's the answer? Do you 09:43	7 to store the location into this location 09:47
8 have an opinion or do you not have an opinion? Does 09:43	8 register. 09:47
9 it have to be one physical location? Yes or no? 09:43	9 Do you see that, sir? 09:47
10 A. The simplest implementation would be one 09:43	10 A. I do see that. 09:47
11 physical location, but, you know, it depends on -- 09:44	11 Q. That language means that the patent is 09:47
12 it depends on the network. 09:44	12 limited to the use of a home agent or foreign agent. 09:47
13 If an operator had a network in one 09:44	13 Correct? 09:47
14 country and another network in another country, they 09:44	14 A. The patent says that the location register 09:47
15 might want to have a separate location register in 09:44	15 may be a home agent or foreign agent, and I read 09:47
16 each country. But that is, you know, outside the 09:44	16 that as home agent or foreign agent being an 09:48
17 scope of my opinions as stated in my declaration. 09:44	17 optional implementation. 09:48
18 Q. In other words, you can know and be able 09:44	18 THE WITNESS: I think we lost . . . 09:48
19 to access the location register without it being in 09:44	19 MR. CURTIS: Okay. Let's just sit 09:48
20 one physical location. Correct? The network can do 09:44	20 here with the record on and let the clock run. 09:48
21 that? 09:44	21 THE WITNESS: Okay. 09:48
22 A. I don't believe that's what I said. 09:44	22 (Pause.) 09:50
23 Q. I'm actually asking you a question. Does 09:44	23 MR. CURTIS: He's saying he lost 09:51
24 it -- it needs to be in one physical location for a 09:44	24 internet. I'm sorry. Let's take a break. I'm good 09:51
25 location register to be accessed across a network. 09:44	25 with that. We're comfortable. Let's take a break, 09:51
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1 Fair? 09:44	1 Peter, Videographer, Court Reporter. 09:51
2 A. What I said was that it needs to be in a 09:44	2 THE VIDEOGRAPHER: We are off the 09:51
3 known networking location so that a query made to 09:44	3 record at 9:52. 09:51
4 that networking location can obtain the information 09:45	4 (Recess: 9:52 to 10:35 a.m.) 09:51
5 that it needs for the patent to function. 09:45	5 THE VIDEOGRAPHER: We are on the 10:34
6 Q. And a known -- to be a known networking 09:45	6 record at 10:35. 10:34
7 location, it must be a single physical location. 09:45	7 BY MR. SHEASBY: 10:34
8 Correct? 09:45	8 Q. Sir, did you have any conversations with 10:34
9 A. It would depend on what you mean by 09:45	9 your counsel at the break? 10:34
10 "physical location." 09:45	10 A. I did not. 10:34
11 Q. I mean a single physical box. 09:45	11 Q. I want to look at -- you referenced RC 202 10:34
12 A. A single physical box would be the 09:45	12 [sic] in your declaration. Correct? RFC 2002? 10:34
13 simplest implementation. 09:45	13 A. RFC 2002. 10:34
14 Q. It's the only allowed implementation. 09:45	14 Q. Yes. 10:34
15 Correct? 09:45	15 Did you read that document in preparation 10:34
16 A. I'm not sure what you mean by "allowed." 09:45	16 for your expert opinion? 10:34
17 Q. By the claims. 09:46	17 A. I did read that document. 10:35
18 A. I don't have an opinion on whether the 09:46	18 Q. I'm marking as an exhibit RFC 2 -- I'm 10:35
19 claims -- how the claims allow the physical 09:46	19 introducing this as an exhibit. Let me know when 10:35
20 implementation. 09:46	20 you get it. 10:35
21 Q. Okay. 09:46	21 (Pause.) 10:35
22 Let me ask you the next question, which is 09:46	22 A. Is that Exhibit 6? 10:35
23 -- let's go to the discussion of foreign agent in 09:46	23 Q. Yes. 10:35
24 the patent. And I believe it starts at column 09:46	24 A. Okay. I have it. 10:36
25 seven. 09:46	25 (Deposition Exhibit Number 8 10:34
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1 marked for identification.) 10:33	1 protocols would communicate to a fixed node to 10:43
2 BY MR. SHEASBY: 10:36	2 update and register locations. 10:43
3 Q. Is there anything in RFC 2002 that 10:36	3 Q. Yeah. And I'm asking you where in the RFC 10:43
4 indicates that either the foreign agent or the home 10:36	4 2002 -- strike that. Where in the RFC 2002 does it 10:43
5 agent must exist in a single physical device or 10:36	5 state that the home agent and foreign agent 10:43
6 single physical location? 10:36	6 functions must be on a single physical location? 10:43
7 A. I'm a little confused. The Exhibit 6 I 10:36	7 A. I would need to reread the specification 10:43
8 downloaded was testimony from Thomas Blackburn. 10:36	8 to see what it says about physical locations. 10:43
9 Q. Why don't we refresh and look for Exhibit 10:37	9 Q. Go ahead. 10:43
10 7. No. All right. Let me try it again. Give me 10:37	10 MR. SHEASBY: And go on the record. 10:44
11 one second. 10:37	11 I'm just going to pop off to get a cup of coffee. 10:44
12 (Pause.) 10:38	12 I'll be right back. 10:44
13 Okay, now try it. It's Exhibit 8. Let me 10:38	13 A. Okay. This is a 158-page document, so I'm 10:44
14 know when you get it. 10:38	14 beginning to read now. 10:44
15 A. I have it. 10:38	15 (Pause.) 10:44
16 Q. Is there anything in RFC 2002 that 10:39	16 BY MR. SHEASBY: 10:46
17 requires the home agent or foreign agent to run on a 10:39	17 Q. Sir, just let me know when you're ready to 10:46
18 single physical location? 10:39	18 answer the question. 10:46
19 A. I would need to read the entire 10:39	19 A. Okay. I'm still reading. 10:47
20 specification, but consistent with my declaration, 10:39	20 Q. Sure. 10:47
21 the home agent/foreign agent need to be at known 10:39	21 (Pause.) 10:50
22 networking locations so that messages such as 10:39	22 A. In scanning through the specification, I 10:51
23 registration messages can reach them. 10:39	23 didn't see a discussion of physical implementation 10:51
24 Q. So I understand that it's your position 10:40	24 of the functions. 10:51
25 that no network located -- it's your position that a 10:40	25 Q. So having scanned through the 10:51
Page 46	Page 48
1 location register must be at a known network 10:40	1 specification, do you find any limitation placed on 10:51
2 location. Correct? 10:40	2 the physical implementation of the home agent and 10:51
3 A. My declaration states that the location 10:40	3 foreign agent? 10:51
4 register needs to be at a known networking location. 10:40	4 A. In my scan of the document I didn't see 10:51
5 Q. And a known networking location requires a 10:40	5 any discussion of the physical implementation of the 10:51
6 single physical discrete location. Correct? 10:40	6 home agent and foreign agent, although I did see on 10:51
7 A. I don't agree with that statement. 10:40	7 page 15, consistent with my declaration, that there 10:51
8 Q. Okay. 10:41	8 is a registration process. 10:51
9 Let me ask you this question: Is the 10:41	9 For example, the specification states when 10:51
10 location of a mobile terminal on a network known in 10:41	10 the mobile node is away from home it registers its 10:51
11 the normal operation? 10:41	11 care of address with its home agent, which, 10:52
12 MR. CURTIS: Objection, form. 10:41	12 consistent with my declaration, means that messages 10:52
13 A. In some circumstances a network will know 10:41	13 from the mobile node need to be able to reach the 10:52
14 the location of a terminal. 10:41	14 home agent, and thus, the home agent needs to be at 10:52
15 BY MR. SHEASBY: 10:41	15 a known networking location. 10:52
16 Q. Are you rendering the opinion that RFC 10:41	16 Q. Is there anything in the RFC 2002 10:52
17 2002 prevents the operations of the -- forbids the 10:41	17 specification that precludes the implementation of 10:52
18 operations of either home agent or the foreign agent 10:42	18 the home agent function and the foreign agent 10:52
19 to be distributed across multiple locations? 10:42	19 function in a distributed manner? 10:52
20 A. As I said in my declaration, a home 10:42	20 A. In my relatively quick scan of the 10:52
21 agent/foreign agent -- sorry. Let me restart. 10:42	21 158-page document, I didn't see a discussion of 10:52
22 I'm just rereading my declaration with 10:42	22 physical implementation of the home agent and 10:52
23 respect to mobile IP. 10:42	23 foreign agent functions. 10:52
24 (Pause.) 10:43	24 Q. Sir, this is the document you reviewed in 10:52
25 What I stated was that the mobile IP 10:43	25 preparing your opinions in this case. Correct? 10:52
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1 location? 11:00	1 location stored in the location register 11:05
2 Q. Is it possible to have a distributed 11:00	2 includes the indoor system ID. 11:05
3 system in which the distributed foreign agent or 11:00	3 Q. The patent teaches that the indoor lit 11:05
4 home agent in which each location that it's 11:00	4 [sic] location information is limited to the indoor 11:05
5 distributed across is known? 11:00	5 system ID. Correct? 11:05
6 A. That's a complex question, and I would 11:00	6 A. The agreed-upon construction is that the 11:05
7 have to study it in detail to be able to offer an 11:00	7 indoor system ID information is the information 11:05
8 opinion. 11:00	8 uniquely identified in the indoor network. Is that 11:05
9 Q. In terms of your best opinion for the 11:00	9 what you're referring to? 11:05
10 Court today, is it possible to have a distributed 11:01	10 Q. No. I'm just saying this passage is 11:05
11 system in which the location registers are at known 11:01	11 teaching that the only indoor location that can 11:06
12 locations even though they are distributed in 11:01	12 exist is the indoor system ID. Correct? 11:06
13 different physical components? 11:01	13 A. The patent uses the indoor system ID as 11:06
14 A. That's a very complicated question, and 11:01	14 the location information associated with the indoor 11:06
15 there are a lot of different variables to consider, 11:01	15 location. 11:06
16 so at this time I don't have an opinion on that. 11:01	16 Q. In this passage is it teaching that the 11:06
17 Q. Does the 728 patent exclude the location 11:01	17 only indoor location information that can be stored 11:06
18 of distributed location registers? 11:01	18 is the indoor system ID? Or can there be also other 11:06
19 A. I don't recall the 728 patent discussing 11:01	19 indoor location information stored? 11:06
20 distributed implementations of the location 11:01	20 A. Lines 23 and 24 refers just to the indoor 11:06
21 register. 11:02	21 system ID. 11:06
22 MR. SHEASBY: Yeah. Move to strike as 11:02	22 Q. It says (reading): Indoor location 11:06
23 not responsive. 11:02	23 stored in the location register includes 11:06
24 BY MR. SHEASBY: 11:02	24 the indoor system ID. 11:07
25 Q. Did you identify any portions of the 728 11:02	25 Do you see that? 11:07
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1 patent that clearly and unambiguously exclude the 11:02	1 A. Right. 11:07
2 use of distributed location registers? 11:02	2 Q. Does that mean that indoor location is 11:07
3 A. The patent repeatedly discusses "a 11:02	3 equivalent to the indoor system ID? Or does the 11:07
4 location register" and other instances it says "the 11:02	4 word "includes" means that there could be additional 11:07
5 location register." 11:03	5 information beyond the indoor system ID? 11:07
6 Q. And you believe that limits it to one 11:03	6 A. I'd need to look at other places in the 11:07
7 single physical location register? 11:03	7 patent, but those lines in isolation don't make that 11:07
8 A. I don't believe the patent discusses the 11:03	8 question clear. 11:07
9 exact implementation of the location register. 11:03	9 Q. Okay. Let's go to Claim 1. Actually, 11:07
10 Q. Okay. 11:03	10 let's go to the Blackburn declaration. I changed my 11:08
11 And by "implementation" you mean physical 11:03	11 mind. 11:08
12 implementation? 11:03	12 It's Exhibit 6. Let me know when you get 11:08
13 A. Correct. 11:03	13 there. 11:08
14 Q. How long have you been in the network 11:03	14 A. Okay. 11:08
15 communications industry? 11:03	15 (Deposition Exhibit Number 6 11:06
16 A. I've been actively involved in networking 11:03	16 marked for identification.) 11:05
17 communications since about 1980. 11:04	17 BY MR. SHEASBY: 11:09
18 Q. Let's go back to the 728 patent. 11:04	18 Q. Let's go to paragraph 53. 11:09
19 A. Okay. 11:04	19 A. Okay. 11:09
20 Q. Let's go to column four, lines 23 and 24. 11:04	20 Q. Do you have any factual disagreement with 11:09
21 A. Column four, lines 23 to 24? 11:04	21 what Mr. Blackburn says in paragraph 53? 11:09
22 Q. Yes, sir. 11:04	22 A. I haven't studied the particular article 11:09
23 A. Okay. 11:05	23 that he refers to so I don't have an opinion as to 11:10
24 Q. Go ahead and read those into the record. 11:05	24 his description of the contents. 11:10
25 A. (Reading): Preferably, the indoor 11:05	25 Q. What about the first sentence of paragraph 11:10
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1 use of the home agents or foreign agent location 12:12	1 mobile node is home, and in the second case, it's at 12:16
2 register embodiment? 12:12	2 a foreign location. 12:16
3 A. My opinions in my declaration did not 12:13	3 Q. In column nine, lines 12 through 15, the 12:16
4 specify whether a home agent/foreign agent was 12:13	4 home agent and the foreign agents are both location 12:16
5 implemented. 12:13	5 registers. Correct? 12:16
6 Q. Right. That's why I'm asking you the 12:13	6 A. It says the location register is the home 12:16
7 question. 12:13	7 agent or the foreign agent, in accordance with the 12:16
8 Are you rendering the opinion that the 12:13	8 mobile IP protocol. 12:17
9 patent claims are limited to the embodiment that 12:13	9 Q. I understand that. 12:17
10 uses a home agent or foreign agent? 12:13	10 In that statement, the foreign agent and 12:17
11 A. I'm not offering an opinion on that 12:13	11 the home agent are both location registers. 12:17
12 question. 12:13	12 Correct? 12:17
13 Q. Okay. 12:13	13 A. No. I disagree. 12:17
14 Now, when the location register 80 is the 12:13	14 Q. Okay. 12:17
15 home agent or the foreign agent, those are two 12:13	15 So you believe that the home agent and 12:17
16 separate physical locations, correct, the home agent 12:13	16 foreign agents are not both location registers? 12:17
17 and foreign agent? 12:13	17 A. Well, what it says is that the location 12:17
18 A. I would need to review the mobile IP 12:14	18 register is the home agent or the foreign agent. 12:17
19 specification, but I do know that in some situations 12:14	19 Q. Yeah, I understand what is written there. 12:17
20 the home agent and foreign agent are at different 12:14	20 And what does that mean to you as a person of skill 12:17
21 locations. 12:14	21 in the art? 12:17
22 Q. Okay. 12:14	22 A. Well, what it means to me is that in the 12:17
23 A. But I can only envision the scenario where 12:14	23 mobile IP situation that the location register is 12:18
24 they are at the same location. 12:14	24 performing home agent or foreign agent functions. 12:18
25 Q. So you can imagine -- for the RFC 2002 12:14	25 Q. So is a location that performs a home 12:18
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1 specification, you can imagine scenarios in which 12:14	1 agent function a location register? 12:18
2 the home agent and foreign agent are at separate 12:14	2 A. That's -- I have to think about that 12:18
3 locations or at the same location physically. Fair? 12:14	3 question. Are you asking whether in general a home 12:18
4 A. I'd need to review the specification, but 12:14	4 agent or a foreign agent would be a location 12:19
5 my recollection of the specification is that a 12:14	5 register? Or are you asking in the context of this 12:19
6 router could implement both functions. So if a 12:14	6 patent? 12:19
7 device was on its home network, not at a foreign 12:14	7 Q. Well, let's start here. In your 12:19
8 location, that the home agent and foreign agent 12:15	8 understanding of RFC 2002, home agent and foreign 12:19
9 would, in that specific situation, be at the same 12:15	9 agent are both examples of location registers? 12:19
10 location. 12:15	10 A. I don't think that's what it's saying. 12:19
11 Q. And what happens when a device was at -- 12:15	11 Q. That's not what I asked you. Move to 12:19
12 not at its home network? 12:15	12 strike. 12:19
13 A. In that case, the mobile device would 12:15	13 In your understanding of RFC 2002, is the 12:19
14 detect the foreign agent and send the registration 12:15	14 home agent and foreign agent both examples of 12:19
15 message to a home agent, assuming it was following 12:15	15 location registers? 12:19
16 all the mobile IP protocols, to register its 12:15	16 A. What this part of the patent says to me is 12:19
17 location, and subsequently data would be sent to it 12:15	17 that the -- in the case of a mobile IP 12:19
18 from the home agent to the foreign agent and then 12:15	18 implementation, the location register is the home 12:20
19 from the foreign agent to the mobile node. 12:16	19 agent or the foreign agent. 12:20
20 Q. So in that situation, in that 12:16	20 Q. I understand what it says there. I am now 12:20
21 implementation, the foreign agent and the home agent 12:16	21 asking you a question. 12:20
22 are not at the same physical location? 12:16	22 In your understanding of RFC 2002, are the 12:20
23 A. It's not really a different 12:16	23 home agent and foreign agent examples of location 12:20
24 implementation. It's the same implementation but 12:16	24 registers? 12:20
25 it's two different cases. In the first case, the 12:16	25 A. If I go -- if I look at RFC 2002, it 12:20
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1 discusses home agents and foreign agents, but I 12:20	1 MR. CURTIS: Objection. Form. 12:26
2 don't believe the specification itself refers to 12:20	2 Outside the scope. 12:26
3 location registers. 12:20	3 A. Well, in the context of the 728 patent, 12:26
4 Q. Do you have an understanding -- 12:20	4 there's an agreed-upon construction for location 12:26
5 A. At least I don't recall that being the 12:20	5 information, and that's information of a locational 12:26
6 case. 12:20	6 area or indoor system ID information, or both. So 12:26
7 Q. Do you have an understanding of what the 12:20	7 if you're using the agreed-upon construction of 12:26
8 word "location register" means? 12:20	8 locational area or indoor system ID information, I 12:26
9 A. I understand what location register means 12:20	9 don't see the foreign agent, if it were to be based 12:26
10 in the context of the 728 patent, and I also 12:20	10 on RFC 2002, storing that specific information. 12:26
11 understand what location register would have meant 12:21	11 BY MR. SHEASBY: 12:27
12 to a person of ordinary skill in the art at the time 12:21	12 Q. Does the home agent store that specific 12:27
13 of the patent. 12:21	13 information? 12:27
14 Q. What does it mean in the context of the 12:21	14 A. The home agent, as implemented by RFC 12:27
15 728 patent? 12:21	15 2002, would not store the location information as 12:27
16 A. In the context of the 728 patent, it 12:21	16 per the agreed-upon construction, based on my 12:27
17 refers to a device that stores location information. 12:21	17 understanding of RFC 2002. 12:27
18 Q. Does the foreign agent store location 12:21	18 MR. SHEASBY: Okay. Why don't we 12:27
19 information in RFC 2002? 12:21	19 break for lunch. 12:27
20 A. I would need to refer to the 12:21	20 THE VIDEOGRAPHER: We are off the 12:27
21 specification. 12:21	21 record at 12:29. 12:27
22 Q. Go ahead. It's been marked as an exhibit. 12:21	22 (Recess: 12:29 to 1:19 p.m.) 12:27
23 Take as much time as you need. 12:22	23 THE VIDEOGRAPHER: We are on the 01:17
24 (Pause.) 12:22	24 record at 1:19. 01:17
25 A. RFC 2002 on page 17 says that the mobile 12:23	25 BY MR. SHEASBY: 01:17
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1 node receives what's a "care of" address. So the 12:23	1 Q. Did you talk to your counsel at the break, 01:17
2 foreign agent would be aware of the mobile node 12:23	2 sir? 01:17
3 because when it receives tunnelled datagrams, it 12:24	3 A. I did not. 01:17
4 decapsulates datagrams and delivers the datagrams to 12:24	4 Q. In a cellular system, what node generates 01:17
5 the mobile node. 12:24	5 the location information? 01:18
6 Q. So now you can answer my question. In RFC 12:24	6 MR. CURTIS: Objection, form. 01:18
7 2002 does the foreign agent store location 12:24	7 A. The location information depends on what 01:18
8 information? 12:24	8 specific cellular technology is being used and the 01:18
9 A. That would depend on what you meant by 12:24	9 location information can also refer to different 01:18
10 "location information" in the context of RFC 2002. 12:24	10 types of location information. 01:18
11 Q. I mean the common understanding of that 12:25	11 For example, in some networks, the 01:18
12 phrase. 12:25	12 location information may be a distance from a cell 01:19
13 A. Mobile IP concerns itself with routing and 12:25	13 tower. In some it might be triangulated data based 01:19
14 addresses, so if by "location information" you meant 12:25	14 on measurements from multiple cell towers. In some 01:19
15 a geographical location such as latitude and 12:25	15 cases it might be GPS information generated by the 01:19
16 longitude, the foreign agent wouldn't have that kind 12:25	16 mobile device and then sent to the network. 01:19
17 of information. 12:25	17 BY MR. SHEASBY: 01:19
18 On the other hand, it works with IP 12:25	18 Q. All those are examples of locational 01:19
19 addresses, so it has an address and location, so 12:25	19 information? 01:19
20 that's what I mean it depends on the context -- 12:26	20 A. That is correct. 01:19
21 (Cross-talk.) 12:24	21 Q. Are there any other examples of locational 01:19
22 Q. Sure. In the context -- 12:26	22 information? 01:19
23 A. -- (inaudible) exactly. 12:26	23 A. The additional types of information 01:19
24 Q. In the context of the 728 patent, what 12:26	24 related to location could be the base station with 01:20
25 does location mean? 12:26	25 which a device is currently connected to, or in some 01:20
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1 cases it can refer to a group of base stations. 01:20	1 to look at the specifications for each of them to 01:24
2 So those are some that come to mind at 01:20	2 see exactly what kind of information they may have 01:25
3 this time. 01:20	3 broadcast. 01:25
4 Q. For indoor WLAN networks, is there any 01:20	4 BY MR. SHEASBY: 01:25
5 information stored about that network other than -- 01:20	5 Q. Did you investigate whether WLAN networks 01:25
6 does that network pass on information other than its 01:20	6 at the time of the patent broadcast information 01:25
7 system ID information? 01:20	7 about their location beyond system ID? 01:25
8 MR. CURTIS: Objection. Form. 01:20	8 A. In developing my declaration I did not 01:25
9 Outside the scope. 01:20	9 consider that question. 01:25
10 A. The information that is communicated in a 01:20	10 Q. How does the system ID information provide 01:25
11 Wi-Fi network, for instance, could include an SSID. 01:20	11 location information? 01:25
12 I'm not sure if that's what we're referring to. 01:21	12 MR. CURTIS: Objection, form. 01:25
13 BY MR. SHEASBY: 01:21	13 A. In the context of the patent, the indoor 01:25
14 Q. And SSID is a system ID? 01:21	14 system ID information would provide location 01:26
15 A. It's a name for the network. I believe it 01:21	15 information to the extent that if you knew the 01:26
16 stands for subscriber set identifier, but it's a 01:21	16 locations where that indoor system ID information 01:26
17 name a user or network manager can enter into the 01:21	17 was being broadcast, then you could identify the 01:26
18 access point so the access point broadcasts that 01:21	18 location of the device to the coverage area of where 01:26
19 particular name of the network. 01:21	19 that indoor system ID information was being 01:26
20 Q. Is that different from an indoor system 01:21	20 provided. 01:26
21 ID? 01:21	21 BY MR. SHEASBY: 01:26
22 A. The indoor system ID information is one of 01:22	22 Q. Does location information in the patent 01:26
23 the agreed-upon construction's information uniquely 01:22	23 require that it be geographic information? 01:26
24 identifying the indoor network. The patent, I don't 01:22	24 A. I'd have to review the patent to be sure, 01:26
25 believe, mentions SSID. 01:22	25 but I don't recall a discussion of geographic 01:26
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1 Q. Right. 01:22	1 information with respect to parameters such as 01:27
2 Does SSID provide location information on 01:22	2 latitude or longitude. 01:27
3 where a device is located? 01:22	3 Q. Well, why don't you go ahead and read the 01:27
4 MR. CURTIS: Objection, form. Outside 01:22	4 patent and tell me whether location information 01:27
5 the scope. 01:22	5 requires geographic information in the patent? 01:27
6 A. It would depend on the implementation, but 01:22	6 MR. CURTIS: Objection, form. Outside 01:27
7 generally speaking I would say no. 01:22	7 the scope. 01:27
8 BY MR. SHEASBY: 01:22	8 A. Well, I don't know if it's really 01:27
9 Q. Why do you say that? 01:22	9 necessary to read the patent because location 01:27
10 A. Well, for instance, I can have multiple 01:23	10 information is an agreed-upon construction 01:27
11 access points broadcasting the same SSID, so the 01:23	11 specifically meaning information in a locational 01:27
12 SSID that I receive only tells me that I can connect 01:23	12 area or indoor system ID information. 01:27
13 to a network with that name. It doesn't necessarily 01:23	13 BY MR. SHEASBY: 01:27
14 tell me what location I'm in. 01:23	14 Q. And does the locational area require 01:27
15 Q. In a WLAN base station it broadcasts 01:24	15 geographic information? That's the question I'm 01:27
16 information beyond its system ID. Correct? 01:24	16 asking. 01:27
17 A. I would have to look at the specific 01:24	17 A. Well, as construed, the term refers to 01:27
18 wireless LAN technology to answer that question. 01:24	18 either locational area or indoor system ID 01:28
19 Q. As a general rule at the time of the 01:24	19 information, so I suppose it would depend on what 01:28
20 patent, WLAN networks broadcast more than just their 01:24	20 you mean precisely by "geographic information." 01:28
21 system ID. Correct? 01:24	21 Q. What does locational area mean? 01:28
22 MR. CURTIS: Objection, form. Outside 01:24	22 MR. CURTIS: Objection, form. Outside 01:28
23 the scope. 01:24	23 the scope. 01:28
24 A. At the time of the patent there were 01:24	24 A. I'd have to refer to the patent. Do you 01:28
25 multiple wireless LAN technologies, and I would have 01:24	25 want me to do that? 01:28
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